

What I claim is:

1. A method for making a cut and puncture resistant laminated fabric comprising laminating a layer of thermoplastic film to a layer of fabric comprised of a high performance yarn, wherein the laminating step is conducted at a temperature
5 between about 230°F and about 290°F with a contact time of between about 5 minutes and about 15 minutes with the application of a laminating pressure of between about 50 psi and about 500 psi.
2. The method of claim 1 wherein the thermoplastic film is selected from the
10 group consisting of high density polyethylene, low density polyethylene and ethylene vinyl acetate.
- Sub 3. The method of claim 1 wherein the high performance fiber is comprised of
15 a material selected from the group consisting of extended chain polyethylene, ultra high molecular weight polyethylene, and aramid.
4. The method of claim 1 wherein the laminating step is conducted at a
20 temperature of about 250°F with a contact time of about five minutes and the laminating pressure is about 416 psi.
5. The process of claim 1 wherein the laminating step is conducted at a
temperature of between about 230°F and about 280°F.
6. The process of claim 1 wherein the laminating step is conducted at a
25 temperature of about 250°F.
7. The process of claim 1 wherein the laminating step is conducted at a
pressure between about 50 psi and about 150 psi.

8. The process of claim 1 wherein the laminating step is conducted at a temperature above 250°F and further comprises permitting the laminate to cool to a temperature of about 250°F before releasing the laminating pressure.

5 9. The process of claim 1 wherein the laminating step is conducted at a temperature of about 230°F and further comprises heating the laminate to a temperature of about 250°F for a period of about 4 hours.

10 10. The process of claim 1 wherein the polyethylene film is constructed from high density polyethylene.

11. The process of claim 1 wherein the polyethylene film is constructed from low density polyethylene.

15 12. The process of claim 1 wherein the fabric is composed of extended chain polyethylene yarns in a woven construction.

13. The process of claim 1 wherein the fabric is a knit construction.

20 14. The process of claim 1 wherein the fabric is a felt construction.

15. A method for making a cut and puncture resistant laminated fabric comprising:

- 25 a) tacking a thermoplastic film to a fabric comprised of a high performance fiber to form a lightly laminated material;
- b) rolling the lightly laminated material into a tightly wound bundle; and
- b) heating the tightly wound bundle at a temperature of about 250 degrees Fahrenheit for about four hours.

16. The method of claim 15 wherein the thermoplastic film is constructed from a material selected from the group consisting of high density polyethylene, low density polyethylene and ethylene vinyl acetate.

17. The method of claim 15 wherein the high performance fiber is comprised of a material selected from the group consisting of extended chain polyethylene, ultra high molecular weight polyethylene, and aramid.

18. The method of claim 15 wherein the tacking step is conducted in a heated calender roll device.

19. The method of claim 15 wherein the tacking step is conducted in a heated flat press.

20. A method for making a cut and puncture resistant laminated fabric under a laminating pressure comprising:

a) rolling a thermoplastic film and a high performance fabric into a tightly wound bundle; and

b) heating the tightly wound bundle at a temperature of about 250 degrees Fahrenheit for about four hours, wherein the step of rolling generates the laminating pressure applied to the bundle.

21. The method of claim 21 wherein the heating step is conducted for between about four hours and about eight hours.

22. A flexible, substantially air and liquid impervious laminate comprising a knit fabric constructed of a high performance fiber the fabric laminated with a layer of thermoplastic film under sufficient heat and pressure to force the thermoplastic film into the interstices of the fabric structure.

23. A laminate according to claim 22 wherein the thermoplastic film is comprised of a material selected from the group consisting of high density polyethylene, low density polyethylene and ethylene vinyl acetate.

5 24. A laminate according to claim 22 wherein the high performance fiber is comprised of a material selected from the group consisting of extended chain polyethylene, ultra high molecular weight polyethylene, and aramid.

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